



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,885	09/23/2004	Tatsukazu Kimura	CU-3914 RJS	8117
26530	7590	09/06/2007	EXAMINER	
LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1600 CHICAGO, IL 60604			MAKI, STEVEN D	
			ART UNIT	PAPER NUMBER
			1733	
			MAIL DATE	DELIVERY MODE
			09/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/508,885

Applicant(s)

KIMURA ET AL.

Examiner

Steven D. Maki

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Art Unit: 1733

1) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

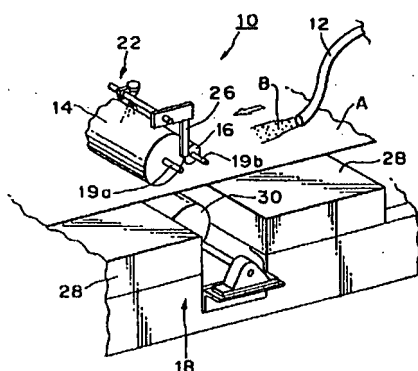
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) **Claims 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 808 (JP 08-112808) in view of Hauber et al (US 6,878,321), Sucech et al (US 5,683,635), Watras (US 2001/0044016) and Birdsey (US 1,514,827).**

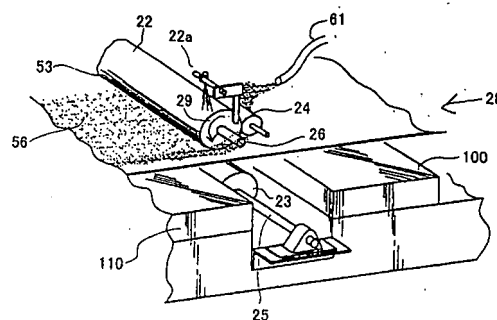
Japan 808, Hauber et al, Sucech et al, Watras and Birdsey are applied as in paragraph 2 of the last office action (paragraph 2 of the last office action is incorporated herein by reference).

Applicant acknowledges that Japan 808 discloses a spreading roll 14. Applicant argues that Japan 808's spreading roll fails to have the claimed width of 98-108% of the width of the board (distance between boundary lines of the front and side surface).

Figure 1 of Japan 808 and figure 3 of this application are provided below:



JAPAN 808



APPLICANT

As can be seen from the above figures, Japan 808's spreading roll 14 is substantially the same as applicant's spreading roll 22. As can also be seen from

the above figures, both of Japan 808's spreading roll 14 and applicant's spreading roll 22 have a length less than the width of the paper sheet. Japan 808's disclosure to make a plaster board comprising paper sheet A on one side using a spreading roller 14 having a length less than the width of the paper A to form a spread portion and non-spread portions with a width of 10-50 mm as described in paragraph 15 of the machine translation fairly suggests the claimed length of the spreader roll being 98-108% of the width of the plaster board (distance between boundary lines of the front surface and the side surface). The relatively small width of the non-spread portions formed by using a spreader roll 14 having a length less than the width of the paper A reasonably suggests a spreading roll having a length about the same as the width of the board (distance between boundary lines of the front and side surface). With respect to the width of the board being equal to the distance between boundary lines of the front and side surface, see applicant's definition at page 25 of the specification.

Applicant argues that Japan 808 does not teach or suggest the relation between the length of the spreading roll 14 and the width of the paper sheet A and the distance between boundary lines of the front and side surfaces of a product. This argument is not well taken. Examiner disagrees that Japan 808 does not teach the relation between the width of the paper sheet A and the width of the plaster board (distance between boundary lines of the front and side surface). As noted in the last office action, Japan 808's process for making a plaster board forms a layered structure of the overlay sheet - gypsum slurry - lower paper sheet. Since the lower paper sheet defines one side of the board, the width X of the lower paper sheet has a relation to the width W of the plaster

Art Unit: 1733

board (distance between boundary lines of the front and side surface). In particular, the width W of the plaster board cannot be greater than the width X of the lower paper sheet A.

Applicant comments and examiner agrees that the length of Japan 808's spreading roll 14 is smaller than the width of the paper so that a non-spreading portion 20 having a width of 10 mm to 50 mm is formed between each end of the spreading roll and the edge of the paper. In other words, Japan 808 discloses width X (paper sheet A) = width Y (left non-spread portion) + length L (spreading roller 14) + width Y (right non-spread portion) wherein Y (width non-spread portion) is 10-50 mm. When the width Y of the non-spread portion is 10 mm, the length L of the spreading roll 14 is:

$$\text{width X (paper)} = \text{width Y (non-spread)} + \text{length L (roll)} + \text{width Y (non-spread)}$$

$$\text{width X (paper)} = 10 \text{ mm} + \text{length L (roll)} + 10 \text{ mm}$$

$$\text{length L (roll)} = \text{width X (paper)} - 20 \text{ mm}$$

$$\text{length L (roll)} = \text{width X (paper)} - 0.79 \text{ inches}$$

As noted in the last office action, Japan 808's process for making a plaster board forms a layered structure of the overlay sheet - gypsum slurry - lower paper sheet. Since the lower paper sheet defines one side of the board, the width X of the lower paper sheet has a relation to the width W of the plaster board (distance between boundary lines of the front and side surface). If the width X of the paper sheet equals the width W of the plaster board, then the length L of the spreading roll 14 is 98.3% of the width W of the plaster board when the plaster board has a standard width of 4 feet (48 inches) as demonstrated below:

Art Unit: 1733

$$X = W$$

$$X = Y + L + Y$$

$$\Downarrow$$

$$W = Y + L + Y$$

$$4 \text{ feet} = 10 \text{ mm} + L + 10 \text{ mm}$$

$$4 \text{ feet} = 20 \text{ mm} + L$$

$$L = 4 \text{ feet} - 20 \text{ mm}$$

$$L = 48 \text{ inches} - 0.79 \text{ inches}$$

$$L = 47.2 \text{ inches}$$

$$\Downarrow$$

$$L / W = 47.2 \text{ inches} / 48 \text{ inches}$$

$$L / W = 0.983$$

$$\Downarrow$$

$$L = 98.3\% W$$

The length L of the spreading roll being 98.3% of the width of the plaster board (distance between boundary lines between the front surface and the side surface) falls within the claimed range of 98% to 108%. When the lower paper sheet is folded as suggested by the applied prior art, then width X (lower paper sheet) is slightly greater than the width W (plaster board) such that, in the above example, length L (spreading roll) is slightly greater than 98.3% width W (plaster board) so that this range falls within or overlaps the claimed range and thereby renders the specified length of the spreading roll obvious. As to the width of a lower sheet being slightly greater than the width of the

board so that it can be folded about the edge, it is noted that Hauber et al, which shows a folded lower sheet in figure 7, describes the width of the bottom face sheet 14 upon which the core slurry has been evenly spread out is slightly larger by about one to two inches (25-50 mm) than the width of the top face sheet 114 (col. 4 lines 26-30).

Remarks

3) Applicant's arguments filed 6-14-07 have been fully considered but they are not persuasive. Applicant's arguments are addressed above.

Pacione (US 5,259,163) is cited of interest for "... typical dimensions of a conventional plasterboard panel i.e. four feet width by eight feet length, a base thickness of one half inch (nominal)" (col. 6 lines 5-7).

Ferguson (US 5,799,458) is cited of interest for "Drywall panels are typically produced in lengths up to 16 feet, and standard widths of 48 and 54 inches" (col. 1 lines 13-15).

Phillips et al (US 5,718,797) is cited of interest for "A typical finished sheet of gypsum wallboard is four feet wide ..." (col. 2 lines 63-64).

Cooper et al (US 6,254,817) is cited of interest for "... the eight-foot length by four-foot width common to dry wall boards" (col. 5 lines 31-32).

4) No claim is allowed.

5) **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 1733

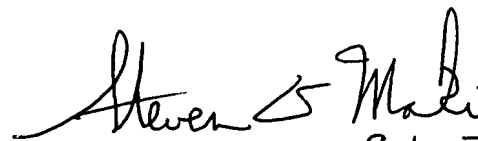
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven D. Maki
September 1, 2007


STEVEN D. MAKI 9-1-07
PRIMARY EXAMINER